

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A high-pressure discharge lamp, ~~comprising:~~ lamp comprising:

a burner including a burner wall and a discharge chamber enclosed by said burner wall, wherein a region with a lowest temperature and a region with a highest temperature establish themselves at ~~the contour of the~~ burner wall during operation of the lamp and in dependence on the mounting position of the lamp, and

a multilayer interference filter which is provided on a portion of ~~an outer contour a~~ coldest part of the burner wall, ~~which wherein~~ interference filter reflects towards the discharge chamber mainly light in a wavelength range of infrared light, and ~~wherein the material of the burner wall has its maximum emissive~~

~~power and the material of the burner wall is not transparent to the~~
~~infrared light~~ one layer of the multilayer interference filter
includes at least one of niobium oxide, hafnium oxide, silicon
nitride.

2. (Currently Amended) The high-pressure discharge lamp as
claimed in claim 1, wherein ~~a~~ the one layer with ~~has~~ a higher
refractive index ~~and a~~ than a further layer with ~~of the multilayer~~
interference filter with having a lower refractive index occur,
and wherein a plurality of the one layer and the further layer
occurs in alternation ~~in the layer structure of the multilayer~~
~~interference filter.~~

3. (Currently Amended) The high-pressure discharge lamp as
claimed in claim 2, wherein the further layer of the interference
filter having the lower refractive index preferably comprises
predominantly SiO_2 , and the ~~second one~~ layer of the interference
filter ~~is made of a material~~ further includes zirconium oxide having
a higher refractive index than SiO_2 , ~~preferably predominantly~~
~~zirconium oxide (ZrO_2).~~

Claims 4-6 (Canceled)

7. (Previously Presented) The high-pressure discharge lamp as claimed in claim 1, wherein the high-pressure gas discharge lamp is a UHP lamp.

8. (Currently Amended) The high-pressure discharge lamp as claimed in claim 1, wherein ~~the material of the burner wall is made in particular of comprises quartz, and accordingly the interference~~ filter is capable of reflecting mainly infrared light in ~~the a~~ wavelength range from 2 μm to 5 μm .

9. (Previously Presented) A lighting unit comprising at least a lamp as claimed in claim 1.

10. (Previously Presented) A projection system comprising at least a lamp as claimed in claim 1.

11. (New) The high-pressure discharge lamp of claim 1, wherein

the portion of the coldest part provided with the multilayer interference filter has a higher temperature than a previous coldest spot prior to application of the multilayer interference filter on the portion.

12. (New) The high-pressure discharge lamp of claim 1, wherein the multilayer interference filter shifts a location of the coldest part.

13. (New) The high-pressure discharge lamp of claim 1, wherein the multilayer interference filter is configured to lower an operating temperature of the high-pressure discharge lamp by approximately 40°K.